



Operation of Technology Parks as Hubs for Research and Dissemination in Bougouni

Bougouni 2017

Introduction:

This report is a synthesis of Africa RISING activities implemented in the District of Bougouni for the demonstration and dissemination of sustainable land and water management technologies in the intervention villages of the project.

1- Research activities and data collection:

- a- Trials and demonstrations:** main research activities implemented in the technology parks of Flola and Madina in the District of Bougouni are related to the demonstration of agronomic demonstration trials and data collected. The trials conducted in the technology parks include Contour bunding, dual purpose and high yield hybrid sorghum, improved animal feed technology

Trials/Experiments	Research team leader	Technology park site	Replication N°
Contour bunding Technology	Dr Birhanu	Flola and Madina	12
Soil Moisture in CBT and W/CBT	Drs Birhanu Z and Kalifa Traore	Flola	8
Runoff in CBT and W/CBT	Dr Traore K	Flola and Madina	8
High Yield Hybrids and Dual Purpose Sorghum	Dr Nebie	Madina	3
Different fertilizer response of sorghum Split-Plot Design	Dr Birhanu Z and Dr Folorunso A	Flola	4
Improve feeding trials	Dr Nantoume H	Flola and Madina	6

- b- Biophysical and Socio-Economic Data:** Soil moisture, groundwater, rainfall and runoff parameters were recorded during the dry season and rainy season. Agronomic parameters for trials were collected according to protocols established by research teams.

A survey was carried by CCAFS in Africa RISING target villages to assess farmers' perception of climate change, main agricultural practices. During this survey 200 farmers were interviewed in the intervention villages by trained enumerators and project technicians. A survey investigating the socio economic benefit of the technologies disseminated in the target villages. During the survey 45 farm households were interviewed by the enumerators.

the livestock research component lead by researchers of the Institute for Rural Economy conducted a survey beside 80 farm households to investigate livestock feed preferences and the constraints related to feed improvement in the villages' of Dieba, Flola, Madina and Sibirila. The interviews in the villages were conducted by the technicians trained by the researcher.

Farmer Radio International has conducted a formative study in the target villages of Africa RISING. The objectives were to assess farmers' knowledge on dual purpose sorghum. 157 farmers participated to 8 focus groups organized by FRI.

2- Scaling activities:

a- Training conducted:

More than 700 farmers and extension workers have participated to trainings sessions centered on the integration of climate information and services in farming activities, integrate soil fertility management, sustainable land management practices, improved varieties (hybrid and dual purpose sorghum) and improved animal feeding technologies conducted between May and December 2017. The training sessions were held either in Madina, Flola or in Madina and facilitated jointly by ICRISAT, IER, and AMEDD.

Numbers of Farmers trained from July to December 2017 in Bougouni							
Theme	Madina			Flola			Total
	Male	Female	S/T	Male	Female	S/T	
Improved varieties and cultural technics	47	13	60	48	12	60	120
Striga and Soil Fertility Management	49	11	60	50	10	60	120
Cultural techniques (weeding, fertiliser application)	48	12	60	45	15	60	120
Compost	45	15	60	47	13	60	120
Improve feedings	27	13	40	19	17	36	76
PICSA	134	26	160	27	13	40	200
Total	350	90	440	236	80	316	756

b- Multi-stakeholder Innovation Platforms:

Three Innovation Platform (IP) meetings facilitated by AMEDD/FENABE were held respectively in Faradiéle, Madina and Bougouni. The objectives were to assess the strength and weakness of the established IPs in Bougouni and intervention villages. The second point of discussion was about the diffusion of technologies exposed in the technology parks. According to participants the main constraints were the reduction of platform participants at communal and district levels due to reduction in the budgets. Regarding the diffusion of validated technologies in Bougouni, participants suggest the extension of Africa RISING to neighboring villages, the organisations of farmers' visits, and farmer field days.

c- Farmer field day

The field day organized jointly by Africa RISING and ARDT was a key moment of exchange between the researchers and farmers. More than 300 farmers have participated

to the visit of the technologies of the Parks of Madina and Flola. The exchanges during the field day were related to improved varieties of sorghum, fertilizers treatment, and the land management technologies. The vegetable demonstration were highly appreciated by women farmers'. The demonstration of chopper and improved feeding for animals were discussed during the visit in Technology Parks.

d- Radio emissions:

In Partnership of Farm Radio International, the radio Kafo Kan of Bougouni have broadcasted a series of emissions promoting high yielding and dual purpose sorghum. In addition two workshops gathering farmers' and extension workers were organized by FRI.

During the field day, the key moments were compiled and broadcasted during two emissions by the Radio

3- Infrastructure:

To alleviate poverty and promote dry season farming, the Technology Park was equipped with two new wells and a chateau of 5 m³ and a solar pump. An area of 0.25 ha was equipped with drip irrigation system and 3 water pipes were installed in the Park of Flola. In the Park of Madina the broken tank and solar panel were replaced and are functional.



New Chateau in Flola and Replacement of the water tank and solar panel in Madina. January 2018 and September 2017. Credit: Dicko

4- Visits of the Technology Parks:

Aside of Africa RISING research teams, the Technology Parks have been visited by the Coordinator of United Nation Development Program (UNDP) project on sustainable land and water management in French (Gestion Durable des Terres et des Eaux). The exchanges with the GDTE team were related to the type of technologies installed in the Parks and possibilities of collaboration through training and exchange visits of farmers to the technology parks. The Malian company for Textile Development (CMDT and the local Director of Agriculture have equally visited the Park of Flola and Madina and the contour bunding realized in Flola farmers' field.

ANNEXES

Annexes 1: Pictures



Training of Extension Workers and Farmers' on PICSA in Bougouni. May 2017. Credit: Dicko



Training of Farmers' Trainers in Bougouni. July 2017. Credit: DICKO



Farmers Training on cultural technics and silage making in Bougouni. July and September 2017. Credit: Dicko



Meeting with researchers and Training of Africa RISING Technician in Bougouni. June and September 2017. Credit: Dicko



Visit of the Technology Parks by GDTE-UNDP project team. July 2017. Credit: Dicko



Visit of Vegetable demonstration and dual purpose sorghum during the Field Day. October 2017. Credit: Dicko



Visit of Integrate fertility management trials during the Field Day in Flola. October 2017. Credit: Dicko



Innovation Platform sessions in Faradieles and Madina/Bougouni. August 2017



New Chateau constructed in Flola and the new water tank for Madina. January 2017. Credit: Dicko